The effects of acute respiratory illness on exercise and sports performance outcomes in athletes – a systematic review by a subgroup of the IOC consensus group on "Acute respiratory illness in the athlete"

Supplementary Table S1: Pathological classification (main and subgroups) of acute respiratory illness (ARill) by diagnostic method*

Pathological classification		Methods to diagnose ARill	Description
Main group	**Subgroup**		
Undiagnosed acute respiratory illness (ARill)		• Self-reported symptoms of ARill only • Self-reported symptoms combined with an algorithm at least partially validated for ARill • Self-reported symptoms of an ARill reviewed by a physician, but without clinical or laboratory evaluation • Clinical diagnosis of an ARill by a physician, based on history and clinical examination	• General symptoms of an ARill where the pathology could not be attributed specifically to an infection • ARill studies could include illnesses that are due to either infective or non-infective causes but were not specified in the study design
Acute respiratory infection (ARinf)	Suspected acute respiratory tract infection (ARinf)	• Self-reported symptoms combined with an algorithm at least partially validated for ARinf • Self-reported symptoms of an ARinf reviewed by a physician, but without clinical or laboratory evaluation • Clinical diagnosis of an ARinf by a physician, based on history and clinical examination	• General symptoms and/or physical signs suggestive of an ARinf, but where the pathology of an infection was not confirmed • The validated questionnaires that were used include the Wisconsin Upper Respiratory Symptom Survey (WURSS-21®)[1], the Jackson Cold Scale (JCS)[2], or other questionnaires in which the severity of the symptoms were scored to provide a quantitative assessment,[3, 4]
	Confirmed acute respiratory tract infection (ARinf)	• Clinical diagnosis of ARinf by a physician and confirmed by laboratory investigation to identify a specific pathogen as follows: polymerase chain reaction (PCR) testing on specimen(s), culture of an organism from specimen(s), or serology (e.g. rise in antibody titres)	• In some cases, a diagnosis of an ARinf caused by a specific pathogen can also be regarded as confirmed when diagnostic clinical features with a high sensitivity and specificity are present in suspected cases • In such case there is also a high pre-test probability of an ARinf (e.g., a history and typical rash in an athlete where there is a confirmed viral outbreak in a travelling team, or during an epidemic/pandemic)

*This table is replicated from a paper under review with the British Journal of Sports Medicine[5] from the same working group (IOC Consensus group on "Acute respiratory illness in the athlete").

References:

1.   Barrett, B., et al., *The Wisconsin Upper Respiratory Symptom Survey (WURSS): a new research instrument for assessing the common cold.* J Fam Pract, 2002. **51**(3): p. 265.

2.   Jackson, G., H. Dowling, and R. Muldoon, *Acute respiratory diseases of viral etiology. VII. Present concepts of the common cold.* Am J Public Health Nations Health, 1962. **52**(6): p. 940-45.

3.   Fricker, P., et al., *Influence of training loads on patterns of illness in elite distance runners.* Clin J Sports Med, 2005. **15**(4): p. 246-252.

4.   Matthews, A., et al., *A self-reported questionnaire for quantifying illness symptoms in elite athletes.* Open Access J Sports Med., 2010. **1**: p. 15-22.

5.   Snyders, C., et al., *Acute respiratory illness and return to sport: A systematic review and meta-analysis by subgroup 5 of the IOC consensus group on "Acute respiratory illness in the athlete"*. Br J Sports Med, 2021. **(under review)**.